SWG Project Annual/Interim Report for 2009

Project Title: Restoring Tall-grass and Mixed-grass Prairie in Cropland-dominated Landscapes of Northeastern North Dakota

Partners: US Fish and Wildlife Service, North Dakota Natural Resources Trust, Delta Waterfowl Foundation, North Dakota Game and Fish Department, Alliance Pipeline

The goal of this SWG project is to restore grasslands that in terms of heterogeneity resemble the native-dominated grassland habitat that formerly covered most of northeastern North Dakota in the mid-1800's. In 2009, this was accomplished by seeding native perennial herbaceous cover on approximately 173 acres of formerly cropped National Wildlife Refuge System Lands within the Devils Lake Wetland Management District (DLWMD). Seed mixtures contained no less than 23 species of grasses, forbs, and small shrubs (i.e. prairie rose and lead plant). SWG funding was used to supplement mixtures in combination with DLWMD funding, Natural Resources Trust funding ($3,000), and Alliance pipeline funding ($10,000). Areas are in habitat blocks of wetlands and grasslands that are currently greater than 600 acres in Benson and Ramsey counties. Also, in 2009, approximately 800 acres of refuge lands were treated with spraying, cultivation, or clipping in preparation for seeding in upcoming years. SWG funding supplemented the fuel and tractor operator salary to complete this effort. These sites are in the eastern mixed-grass prairie (Drift Prairie) of northeastern North Dakota (description of this landscape component is located in section 5.2 of North Dakota's Comprehensive Wildlife Conservation Strategy [CWCS]) (Hagen et al. 2005). To reiterate the proposed objectives of this project:

Objective 1. Restore approximately 600 acres of grasslands using diverse, multi-species native vegetation mixtures on priority Waterfowl Production Areas throughout the DLWMD in 2008-2010.

Objective 2. Continue to monitor the vegetative and bird response to native seeded, restored grasslands in the DLWMD indefinitely.

Objective 3. Actively seek partners to assist in research related to using restoration of grasslands as a method for weed control in North Dakota.

This project follows documented needs in the North Dakota's CWCS. Sections 5.1.c, 5.2.c, 5.5.b, and Appendix A all touch on the need for restoring and protecting prairie for species of conservation priority, and the problems of fragmentation, loss of grazing and fire, noxious weeds, and woody encroachment. The objectives also embrace the process of adaptive management articulated in Section 6 of the CWCS.

In addition, staff of the DLWMD are conducting songbird bird, waterfowl, and vegetative surveys to further evaluate this restoration effort. Current results of songbird surveys indicate several occurrences of grasshopper sparrows, Le Conte's sparrows, and Nelson's sharp-tailed sparrows, all three grassland obligate birds that typically require large block of habitat. These

three species are all listed as priority 1 or 2 in the CWCS. We also searched 3 native seeded fields this year for waterfowl nests, identifying species such as mallards, gadwall, blue-winged teal, northern, pintail, and even a couple of redheads (the latter being priority 2 species in the CWCS). Both of these bird surveys are evolving into Master's projects. The songbird survey project will begin this fall in partnership with the University of North Dakota, while the waterfowl study will probably be in partnership with the University of Minnesota and Delta Waterfowl.

Vegetative surveys will be conducted later in the summer as the seed mixes emerge and the species are identifiable. We initiated a Master's project with North Dakota State University to develop an adaptive management model for establishing native seedings. This will be a region-wide model available to other management agencies for conducting similar restorations. Evaluating and monitoring our efforts will allow science to guide our management to improve outcomes for future management.

Hofstrand Waterfowl Production Area – Seeded Spring 2008 with SWG Dollars